

# Brian Tu

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## SKILLS

- **Languages:** Javascript, C/C++, HTML & CSS, Python, Java, Racket
- **Technologies:** Node.js, Express.js, React, Socket.IO, MongoDB, jQuery, Bootstrap, Figma, Git, Heroku
- Proficient in object-oriented and functional programming, RESTful APIs, and Full Stack development learned through various projects.

## EDUCATION

### University of Waterloo

Sep 2020 - Apr 2025

Bachelor of Computer Science, Honours

- **Awards & Academics:** 3.92 GPA (90.2%); President's Scholarship of Distinction
- **Relevant Courses:** Designing Functional Programs (Advanced), Elementary Algorithm Design and Data Abstraction (Advanced)

## PROJECTS

### Companion

Jan 2021

Awarded Honorable Mention @ nwHacks 2021

- A **smart social network** that allows those in times of hardship to find people to talk to, empowering positive social communication.
- Integrated **sentiment analysis** on messages and **data visualization** of client statistics to cultivate healthy relationships.
- Built with **Node.js** and **Express.js** with **Firestore** database to track total user intent, messages, and time spent.
- Led the back-end development, and created the private and public chats using **Socket.IO** to facilitate realtime chat functionality.
- **Initiated group discussions** to provide and organize ideas for product features as well as **helped team members debug code**.

### Lemons Live

Oct 2020

Awarded Top 30 @ Digital Inclusion Challenge 2020

- A **real-time platform for interactive learning**, enabling teachers to engage their students by creating online team competitions.
- Built on a **MongoDB, Express.js, Node.js** stack and Tailwind UI to supply students with an engaging learning experience.
- Developed the **RESTful API** back-end and used **Socket.IO** to integrate online educative games for students and teachers.
- Worked with a team of 6 students and competed against 1000+ students over 30+ countries.
- **Tackled issues in project ideation** and **offered suggestions and feedback** during team brainstorming and discussions.

### CredID

Jan 2020

Awarded "Most Innovative Use of Tech For Good" @ UofTHacks VII

- A web app that **provides digital identities** to people without an official identity to access basic financial and medical services.
- Built using **AWS Rekognition API** that recognizes users faces to create their own identity, and **stored on the Ethereum blockchain**, allowing users to use their identity at banks and fulfill their financial needs.
- **Quickly grasped front-end frameworks** and **set clear goals** amongst team members to ensure project milestones were achieved.
- **Created and designed the front-end** of the application to present an intuitive and simple user experience.

## EXPERIENCE

### TerraCycle Canada

Jun 2019 - Aug 2019

Automation Developer

- Created a user interface in Excel using VBA to help warehouse workers **automate the creation of custom shipment labels** for products, resulting in **83% less time** needed to create labels.
- Developed a **chrome extension** used by the Director of Operations to download packaging label images from multiple tabs at once to **optimize manual work**.
- Coded macros in Excel using VBA to organize data of 100+ TerraCycle clients, such as monthly audits.

### High School Leadership

Sep 2018 - Jun 2020

Co-Founder of Rock Band & Head of Ping Pong Club

- Led band performances for school events and provided opportunities for students to perform and learn new instruments.
- Organized ping pong tournaments and implemented a new public table system to promote well-being for 600+ students.

## INTERESTS

- **Hackathons:** Hacker at Hack the North, nwHacks 2021, Execute 2020, Digital Inclusions Challenge 2020, UofTHacksVII, Citizen Hacks, MasseyHacks V, BLGHack4Change
- **Hobbies:** (Sports) soccer, basketball, biking; (Music) guitar (6+ years) and music production; (DIY) guitar and mechanical keyboard